

Health Care Innovation Initiative

Executive Summary

Skin and Soft Tissue Infections (SSTI) Episode Corresponds with DBR and Configuration file V4.0

Updated: December 30, 2019

OVERVIEW OF A SKIN AND SOFT TISSUE INFECTION EPISODE

The skin and soft tissue infections (SSTI) episode revolves around patients who are diagnosed with an SSTI. The trigger event is an office, urgent care center, or emergency department (ED) visit where the primary diagnosis indicates an SSTI.¹ In addition, a visit where the primary diagnosis is an SSTI-specific sign, symptom, or comorbid presentation code with a secondary diagnosis code from among the SSTI diagnosis codes is also a potential trigger event.

All related care – such as imaging and testing, surgical and medical procedures, and medications – is included in the episode. The quarterback, also called the principal accountable provider or PAP, is the provider or group who diagnoses the SSTI. The SSTI episode begins on the day of the triggering visit and ends 30 days after the end of the trigger event.

CAPTURING SOURCES OF VALUE

In treating patients diagnosed with an SSTI, providers have several opportunities to improve the quality and cost of care. Important sources of value include appropriate use of laboratory testing and imaging, following evidence-based guidelines for antibiotic treatment choice and duration, and utilizing a coordinated antimicrobial stewardship program. Additional sources of value include appropriate decision-making in patient triage, including performing indicated procedures in the office setting whenever possible. Providers may also increase efficiency and clinical outcomes through timely follow-up care, which in certain circumstances, may be a phone call or other telemedicine follow-up.

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¹ Episodes that present to the inpatient setting or are triaged into an inpatient setting within one day of a simple SSTI are triggered and then excluded. In doing so, the algorithm does not have the potential to trigger an outpatient SSTI episode during normal follow-up visits for the same patient.

To learn more about the episode's design, please reference the Detailed Business Requirements (DBR) and Configuration File on our website at https://www.tn.gov/tenncare/health-care-innovation/episodes-of-care/searchableepisodes-table.html.

Illustrative Patient Journey

- Patient has symptoms that indicate a possible skin and soft tissue infection
- Initial assessment Outpatient hospital, office, or emergency department (ED)
 - Initial assessment is performed by primary care provider or other clinician
 - Patient receives a physical exam and may undergo laboratory testing (e.g., bacterial cultures) or imaging (e.g., ultrasound) in certain circumstances
 - A diagnosis of a skin and soft tissue infection is made
 - Patient may be triaged to a higher acuity care setting depending on comorbidities and severity

Treatment

Outpatient hospital, office, or

- Patient may be prescribed topical (local) or oral (systemic) antibiotics depending on the suspected type and severity of infection
- Incision and drainage may be performed on purulent infections
- Additional symptomatic treatment (e.g., analgesics, wound care) may be prescribed

- ••• May not be experienced by all patients
- Follow-up care Outpatient hospital, office, home, or ED
 - Patient may receive follow up care, either a visit or phone call, after expected resolution
 - Patient without improvement or worsening symptoms may receive additional testing, adjustment of antibiotics, or triage to higher acuity setting
- Potential complications

inpatient

- Spread of local infection
- Development or progression of abscess
- Sepsis
- Adverse drug reactions
- Complications of

Outpatient hospital, office, ED, or

- inappropriate antibiotic use

Potential Sources of Value



ASSIGNING ACCOUNTABILITY

The quarterback of the episode is the specific health care provider deemed to have the greatest accountability for the quality and cost of care for the patient. To state it differently, the quarterback is the provider who has the greatest ability to influence all of the health care delivered in a given episode. For the SSTI episode, the quarterback is the provider or group that diagnosed the SSTI. The contracting entity or tax identification number of the professional trigger claim will be used to identify the quarterback.

MAKING FAIR COMPARISONS

The episode model is designed to be fair to providers and incentivize best practices without penalizing providers who care for sicker patients. As such, important aspects of the model are:

- Inclusion of only the cost of services and medications that are related to the SSTI in calculation of episode spend.
- Exclusion of episodes when clinical circumstances create the likelihood that the case will deviate substantially from the typical care path or when claims data is likely to be incomplete.
- Risk adjusting episode spend to account for the cost of more complicated patients.

The SSTI episode has no pre-trigger window. During the trigger and post-trigger windows, care for specific diagnoses, specific imaging and testing, specific medications, and specific surgical and medical procedures are included. Care for specific complications is included in the post-trigger window only.

Some exclusions apply to any type of episode, i.e., are not specific to an SSTI episode. For example, an episode would be excluded if more than one payer was involved in a single episode of care, if the patient was not continuously insured by the payer during the duration of the episode, or if the patient had a discharge status of 'left against medical advice'. Examples of exclusion criteria specific to the SSTI episode include patients receiving treatment in inpatient or observation settings at or within one day of initial diagnosis or patients presenting with complicated SSTIs (e.g., necrotizing fasciitis) or severe burns. These patients have significantly different clinical courses that the episode does not attempt to risk adjust. Furthermore, there may be some factors with a low prevalence or significance that would make accurate risk adjustment difficult and may be used to exclude patients completely instead of adjusting their costs.

For the purposes of determining a quarterback's cost of each episode of care, the actual reimbursement for the episode will be adjusted to reflect risk factors captured in recent claims data in order to be fair to providers caring for more complicated patients. Examples of patient factors likely to lead to the risk

adjustment of SSTI episodes include diabetes, obesity, or a history of MRSA. Over time, a payer may adjust risk factors based on new data.

MEASURING QUALITY

The episode reimbursement model is designed to reward providers who deliver cost effective care AND who meet certain quality thresholds. A quarterback must meet or exceed all established benchmarks for any quality metric tied to gain sharing in order to be eligible to receive monetary rewards from the episode model. Other quality metrics may be tracked and reported for quality improvement purposes but may not be tied directly to gain sharing.

The quality metrics linked to gain sharing for the SSTI episode are:

- Bacterial cultures when incision and drainage (I&D) performed: Of the valid episodes that had an I&D procedure performed, the percentage of episodes in which bacterial cultures were obtained (higher rate indicative of better performance)
- SSTI episodes with a first-line antibiotic: Of the valid episodes with an antibiotic prescription filled within the seven days after initial diagnosis, the percentage of episodes in which a first-line antibiotic was filled (higher rate indicative of better performance)

The quality metrics that will be tracked and reported to providers but that are not tied to gain sharing are:

- Infection recurrence: Of the valid episodes with an antibiotic prescription filled within the first 15 days after initial diagnosis, the percentage of episodes with a second antibiotic filled during days 16-30 of the episode window (lower rate indicative of better performance)
- Hospitalizations after initial diagnosis: Percentage of valid episodes with an inpatient admission during the post-trigger window (lower rate indicative of better performance)

- Emergency department (ED) visits after initial diagnosis: Percentage of valid episodes with an ED visit during the post-trigger window (lower rate indicative of better performance)
- Ultrasound imaging: Percentage of valid episodes where ultrasound imaging was obtained during the episode window (rate provided for comparison only)
- Non-ultrasound imaging: Percentage of valid episodes where nonultrasound imaging was obtained during the episode window (lower rate indicative of better performance)
- Incision and drainage: Percentage of valid episodes where an incision and drainage was performed during the episode window (rate provided for comparison only)

It is important to note that quality metrics are calculated by each payer on a per quarterback basis across all of a quarterback's episodes covered by that payer. Failure to meet all quality benchmarks tied to gain sharing will render a quarterback ineligible for gain sharing with that payer for the performance period under review.